

the Refractorium of the new Basilica, by Heinrich Heim, is one where ancient simplicity is combined with great effect. It cannot be doubted that Leonardo da Vinci's work had somewhat guided the German artist: still, these figures also are noble and beautiful, although of northern physiognomy and aspect. The strength and harmony of colour are remarkable, and surpass even that of many frescoes of the Bavarian art-metropolis. It is now seen, that the internal decoration of the Basilica detracts, by its gorgeousness, from the effect which the fine pictures placed in it would have otherwise produced. *Omne minimum nocet.*

The New Cemetery.—This place will soon become the chief receptacle of monumental works of plastic art. Those in memory of Schwanthaler and Gartner have been previously executed, and will now be followed by a colossal statue of Walther, the physician. M. Halbig will adorn the cemetery with a colossal crucifix, which will be placed in its centre, with two basins at each end.

RAILWAY JOTTINGS.

THE 18th of June next has been fixed for opening the portion of the South Wales line from Chepstow to Gloucester, in order to complete the communication by rail between Gloucester and Swansea. The bridge over the Wye at Chepstow is in a forward state, and exertions are being made to complete the heavy tunnel at Cwmbwria, to the west of Swansea, where a large number of excavators have been employed. The works in Pembrokeshire are being pushed forward, and strenuous exertions are being made to complete the Vale of Neath line, so as to be opened simultaneously with the South Wales. The directors of the York, Newcastle, and Berwick have agreed to erect a large and commodious goods station at the south side of Monkwearmouth station. The roof is to be formed on the same principle as that of the International Exhibition Building. The committee of shipowners of the port of Sunderland have had the impudence to memorialise the Board of Trade to impose some restriction on the Great Northern in the conveyance of coal to the London markets. The Board of Trade have expressed their inability to interfere in this particular instance, arguing that the subject was applicable to all railways. Great excursion trains, at reduced fares, have begun for the season to run on all the railways. On Thursday in last week a monster train left the Paddington station for Oxford; another, the South-Western, for Windsor; and on the Eastern Counties, for Cambridge; the Brighton excursion train, however, conveyed the greatest number, between 800 and 900 individuals going by it. More than 4,000 persons left the metropolis by these excursion trains; the rate of travelling averaging three miles for one penny. The concession of the Norwegian railway, of which Messrs. R. Stephenson and Bidder are the engineers, has been given by the government of Norway, says Herapath, to Mr. John Lewis Ricardo and Messrs. Lewis and Brassey. Its length is 50 miles, and it is to run from Lake Menzon to Christiania. The amount of the contract entered into with these gentlemen is 450,000*l.*, which includes the supply of locomotive plant and other rolling stock. The government take one-half of the shares—private individuals the other half. The line is to be opened for traffic in May, 1853. As the great bulk of the produce of the interior of Norway for export to England and other parts of the world, aggregates at Christiania, and as the same remark applies to the import trade, a very large traffic is anticipated over this railway, assisted, as it will probably be, by a new line of first-class steamers from this country. The Piedmont correspondent of the Times informs us that a commercial congress is now sitting at Rome, under Austrian inspiration, for the development of railways in Northern and Central Italy. The imperial cabinet seeks to combine the Lombard-Veneto line, with branches through Parma and Modena, to Bologna, Ancona, Florence, and Leghorn. For this she has assembled deputies from

Parma, Modena, and Tuscany, at Rome, there to discuss with Cardinal Antonelli and the Austrian minister the best means of making this great combination.

THE GUILD OF LITERATURE AND ART.

THE proposal of Mr. Dickens and Sir E. Lytton Bulwer to establish a new institution for struggling authors and artists, has now assumed a definite and hopeful form. The first performance of Sir Edward's play for the benefit of the institution is to take place at Devonshire House on 16th of May, in presence of her Majesty and Prince Albert. The society or guild will embrace the several objects which the members of a profession may be most disposed to secure—such as life insurances, annuities, pensions, &c. An institute will also be established, with certain duties, salaries, and free residences, consistent with the habits and comforts of gentlemen. There will be a warden, with a salary of 200*l.* a year and a house; members with 170*l.* and a house, or 200*l.* without; and associates with 100*l.* a year. There are men more of scientific than of literary pursuits—men who cannot properly be described as either literary men or artists, but who have sacrificed worldly prosperity for the love of science in some one or other of its various branches, whom it would be well to assist by a similar institution, since they cannot, properly speaking, hope to benefit by a foundation devoted to literature and art. We hope, ere long, to see both of these desirable institutes and guilds well established.

AMERICAN PATENTS CONCERNING BUILDING.

Improvement in Planing Machines for dressing the Edges of Boards.—According to the *Journal of the Franklin Institute*, Mr. E. Cornell, of Boston, has taken out a patent for this and thus describes it:—"The first part relates to the method of gearing the top and bottom feed rollers, so that they shall move together, and remain in gear, to whatever extent they may be separated by varying thicknesses of plank; and this part of my invention consists in communicating motion from one roller to the other by means of a cog pinion on the arbor of each, connected by a cog wheel with an outer and inner range of cogs, the inner range engaging the cogs of the pinion on the arbor of the lower roller, and the outer range engaging the cogs of the pinion on the arbor of the upper roller; the arbor of the cog wheel being hung and connected by a link or links with the arbor of the lower roller, and by another link or links with the arbor of the upper roller, so that as the rollers are drawn nearer together or separated, the cog wheel will, by reason of these links, vibrate between the two pinions, and remain in gear with them.

The second part of my invention relates to the method of operating one of the cutter wheels, for either edging, or tonguing, or grooving the tapering edge of plank; and this part of my invention consists in operating the machinery which causes the cutter wheel gradually to approach towards, or recede from, the line of motion of the plank, by the passage of the plank over, and in contact with, one or more cogs or spur wheels, so that this motion shall be received from, and correspond with the motion of the plank.

And this part of my invention also consists in interposing, at some point in the gearing between the wheel or wheels operated by the plank, and the sliding frame or carriage which carries the cutter wheel, a reversing gear, for the purpose of setting the machine to work from the narrow towards the wide end, or from the wide towards the narrow end, and, if suspended, will edge the plank parallel to the other edge.

Claim.—What I claim, therefore, as my invention, is the method, substantially as described, of communicating motion from the bottom to the top roller, by the two pinions combined with the wheel having the inner and outer rim of cogs, by means of the joint links, substantially as described, and for the purpose specified.

I also claim operating the machinery for carrying the cutter wheel towards or from the line of motion of the plank, by the passage of the plank over, and in contact with, a spur wheel or wheels, substantially as described, whereby the motion of the cutter wheel, for edging tapering planks, will be made to correspond with the motion of the plank itself, as described.

I also claim interposing between the wheel or wheels actuated by the plank and the carriage of the cutter wheel, a running motion substantially as described, by means of which the machine can be made to act on the plank from the narrow to the wide end, or vice versa, or, by suspending its operation, edge the plank with parallel sides, as described."

For an Improved Arrangement of Arches in Bridge Trusses. Mr. C. M. Pennington, Rome, Georgia, says:—"The nature of my invention consists in a certain combination and arrangement of upright and inverted arches, by which all thrust against the abutments or piers is prevented, and at the same time securing a permanent structure.

Claim.—Having thus fully described my invention, what I claim therein as new is the method herein described of combining and arranging the several arches of a bridge, so as to make each arch, alternately, the upright and inverted arch, as it passes from one span of the bridge to the other, and vice versa, when one set of said arches have their remotest distance from each other, and their greatest sustaining points directly over and under the points, when the other set of arches are changing from upright or inverted, arches, or vice versa."

For an Improved Method of Loosening Metallic Cores from Hollow Castings. Mr. John C. Parry, Pittsburg, Pennsylvania, says:—"It is a well-known fact that iron shrinks as it cools, and a kettle of the kind I am describing will shrink one-eighth of an inch to every foot in diameter.

Claim.—What I claim as my invention in the above described mode of casting, is the application of cold water to the core or inner metallic flask of a hollow casting when the metal begins to cool, so as to loosen the core (by the contraction caused by the action of the water), sufficiently to remove it without injury to the casting."

TREVES AND MAYENCE.*

IN reviewing the vast and varied monuments of ancient days which that remarkable city, Treves, presents, the visitor who has entered its walls in the spirit of antiquarian inquiry, cannot fail to be impressed with a mournful conviction that the destruction of the great works of ancient art which once so profusely covered the soil, has been effected by the slow and callous hands of ignorance and indifference,—engines more pernicious than the effects of time or the revolutions of nations. A feeling of veneration for the monuments of antiquity was in the middle ages so uncommon, that we fail to discern a trace of it. It is therefore a pleasing tribute to quote an exception in the lamentation of a poet of the fifteenth century, and especially since it was penned over the ruins of Treves.

Mr. J. W. Burgon has happily transferred the sentiment of this beautiful elegy to his English version:—

"How much of power—how much of pride
And beauty, which should longer brave
The might of Time's resistless tide,
Lies wreck'd around you, men of Treves,
Who live beside the blue Moselle,
And quaff the stream ye love so well.

When gazing on your fallen state,
—Methought I gazed on mighty Rome:
The tottering wall—the ruined gate—
The wreck of many a regal dome—
All that at Rome I sigh'd to see,
I saw again, old Treves, in thee.

I spied amid thy yellow corn
A thousand signs of sure decay:
The shrub had sprung where, bleak and worn,
Still proudly rose thy turrets grey;
And flowers of sweetest breath and hue
Along thy broken arches grew.

* From "Colloquies Antiquæ," by O. Smack Smith, F.S.A. J. B. Smith, Compton-street, London.